|  | <br>f Claims |  |
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|  |              |  |

| Application No.  | Applicant(s)   |  |
|------------------|----------------|--|
| 09/658,239       | KNUTSON ET AL. |  |
| Examiner         | Art Unit       |  |
| Lawrence Shrader | 2124           |  |

| 1 | Rejected | ı | (T |
|---|----------|---|----|
| = | Allowed  | + |    |

| -  | _ | (Through numeral)<br>Cancelled |
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| [. | + | Restricted                     |

| N | Non-Elected  |  |
|---|--------------|--|
| _ | Interference |  |

| A | Appeal   |
|---|----------|
| o | Objected |

| Cla   | im   | Date                                  |  |                |              |          |              |              |  |          |  |
|-------|--|---------------------------------------|--|----------------|--------------|----------|--------------|--------------|--|----------|--|
| Final | Original   | 11/18/04                              |  |                |              |          |              |              |  |          |  |
|       | 1  | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | -  |                | _            | $\vdash$ |              |              |  |          |  |
|       | 2  | 1                                     |  |                | _            | _        |              |              |  | Г        |  |
| -     | 3  | 1                                     | $\vdash$   |                | _            |          |              |              |  | $\vdash$ |  |
|       | 4  | V                                     |  |                |              |          |              |              |  |          |  |
|       | 1<br>2<br>3<br>4<br>5<br>6   | 1                                     |  |                |              |          |              |              | _  | _        |  |
|       | 6  | 1                                     |  |                |              |          |              |              | $\vdash$   |          |  |
|       | 7  | 1                                     | T  |                |              |          |              |              | <del>                                     </del> |          |  |
|       |  | 1                                     |  |                |              |          |              |              |  | _        |  |
|       | 8 9  | 1                                     | T  |                |              |          |              |              |  |          |  |
|       | 10   | 1                                     |  |                |              |          |              |              |  | $\vdash$ |  |
|       | 11   | 1                                     |  |                |              |          |              |              |  | H        |  |
|       | 12   | 1                                     | 一  | $\vdash$       |              |          |              |              |  |          |  |
|       | 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32<br>33 | 1                                     |  | $\vdash$       | $\vdash$     | _        |              |              |  |          |  |
|       | 14   | 1                                     | _  | _              | $\vdash$     | ╁        |              | _            |  |          |  |
|       | 15   | J                                     | <del>                                     </del> | _              | $\vdash$     | $\vdash$ | _            | _            |  |          |  |
|       | 16   | J                                     | -  | $\vdash$       | $\vdash$     |          | $\vdash$     | _            | _  |          |  |
|       | 17   | Ì                                     | Н  | -              | $\vdash$     | _        |              | $\vdash$     |  |          |  |
|       | 18   | J                                     | <del>                                     </del> |                | <del> </del> |          | -            |              | $\vdash$   |          |  |
|       | 19   | j                                     |  |                | -            |          | $\vdash$     |              | $\vdash$   |          |  |
|       | 20   | 1                                     | -  |                |              | ┢─       | H            | <del> </del> | ┢  | -        |  |
|       | 21   | 1                                     |  |                |              |          |              | <del> </del> | -  |          |  |
|       | 22   | ľ                                     | ┢  | <del> </del>   | -            | ├        |              | <del> </del> |  | -        |  |
|       | 22   |                                       |  |                |              |          |              |              |  | ⊢        |  |
|       | 24   | -                                     |  | $\vdash$       |              | $\vdash$ |              |              | $\vdash$   | $\vdash$ |  |
|       | 25   |                                       |  | -              |              | ⊢        |              | -            |  | -        |  |
|       | 20   | -                                     | -  | $\vdash$       |              |          | -            | ١            |  |          |  |
|       | 27   | _                                     |  |                |              | $\vdash$ |              | _            | -  | $\vdash$ |  |
|       | 20   | -                                     |  |                |              | $\vdash$ | <u> </u>     |              | ╁  | ┝        |  |
|       | 20   | ⊢                                     |  |                | -            |          | <del> </del> | _            | ┢  | ⊢        |  |
|       | 29   | -                                     |  |                |              | -        |              |              |  | ├        |  |
|       | 30   |                                       |  | ⊢              | -            | ⊢        | -            | <u> </u>     | <del> </del>                                     | -        |  |
|       | 33   | $\vdash$                              | $\vdash$   | -              |              | $\vdash$ | ⊢            | -            | $\vdash$   | $\vdash$ |  |
|       | 32   | <del>  -  </del>                      |  | $\vdash$       |              | ├        | <u> </u>     | <u> </u>     | 1  | $\vdash$ |  |
|       | 34   | <del> </del>                          | ├  | ├—             | $\vdash$     | $\vdash$ | ⊢            |              | -  | -        |  |
|       | 34   | <del> </del>                          | <del>  -</del>                                   |                | -            |          | -            | $\vdash$     | <del> </del>                                     |          |  |
|       | 35   | ├                                     | <del> </del>                                     | -              | <u> </u>     | ├—       |              |              | -  |          |  |
|       | 36<br>37   | -                                     | -  | $\vdash$       | <u> </u>     | $\vdash$ | <u> </u>     | <u> </u>     |  | ├        |  |
|       | 3/   | ├                                     | $\vdash$   | <del> </del>   |              |          | <u> </u>     | _            | <u> </u>   | _        |  |
|       | 38<br>39   | <del> </del>                          | ·  | -              | <u> </u>     | ļ        | <u> </u>     | —            | <del> </del>                                     | <u> </u> |  |
|       | 39   |                                       | -  |                | <u> </u>     | <u> </u> | $\vdash$     | <u> </u>     | _  |          |  |
|       | 40   | <del> </del>                          | <del> </del>                                     | <del> </del>   | <u> </u>     | ├        |              | _            | _  | _        |  |
|       | 41   | <u> </u>                              | -  | -              |              | <u> </u> | <u> </u>     |              |  | <u> </u> |  |
|       | 42   | ├                                     | -  | <u> </u>       | <u> </u>     | <u> </u> | -            |              | -  |          |  |
|       | 43   | ├                                     | <del> </del>                                     | <u> </u>       | <u> </u>     | _        | $\vdash$     | _            | $\vdash$   | -        |  |
|       | 44   | <del>  -</del>                        | -  | <del>  -</del> | <b> </b> -   | <b>—</b> | <u> </u>     | <u> </u>     | -  | <u> </u> |  |
|       | 45   | $\vdash$                              | <u> </u>   | $\vdash$       | <u> </u>     | $\vdash$ | <b> </b>     | <u> </u>     | <u> </u>   | <u> </u> |  |
|       | 46   | <u> </u>                              | <u> </u>   | <u> </u>       | <u> </u>     | <u> </u> | <u> </u>     | <u> </u>     | -  | <u> </u> |  |
|       | 47   | <u> </u>                              | <u> </u>   | ⊢              | <u> </u>     | <u> </u> |              |              | <u> </u>   |          |  |
|       | 48   | ļ                                     | <u> </u>   |                | <u> </u>     | <u> </u> | $\vdash$     | <u> </u>     | <u> </u>   | L.       |  |
|       | 49   | <u> </u>                              | <u> </u>   | <u> </u>       | <u> </u>     | <u> </u> | L            |              | $\vdash$   | <u> </u> |  |
|       |  |                                       |  |                |              |          |              |              |  |          |  |

| ::: | Claim        |  | Date     |          |                |  |          |          |              |                |          |
|-----|--------------|--|----------|----------|----------------|--|----------|----------|--------------|----------------|----------|
|     |              |  |          |          |                |  |          |          |              |                |          |
|     | ā            | na   |          |          |                |  |          |          |              |                |          |
|     | Final        | įģ   |          |          |                |  |          |          |              |                |          |
|     | -            | Original                                     |          |          |                |  |          |          |              |                |          |
|     |              |  |          |          | _              | Ш  | _        |          | _            |                | _        |
|     |              | 51   |          |          | L              |  |          |          |              |                | _        |
| Н   |              | 52   |          |          | _              |  |          |          |              |                |          |
|     |              | 53   |          |          | _              |  |          |          |              |                |          |
|     |              | 54   |          |          |                |  |          |          |              |                |          |
|     |              | 55   |          | ,        |                |  |          |          |              |                |          |
| 1   |              | 56   |          |          |                |  |          |          |              |                |          |
| ::: |              | 57   |          |          |                |  |          |          |              |                |          |
| Ц   |              | 51<br>52<br>53<br>54<br>55<br>56<br>57<br>58 |          |          |                |  |          |          |              |                |          |
|     |              | 59   |          |          |                |  |          |          |              |                |          |
|     |              | 60   |          |          |                |  |          |          |              |                |          |
|     |              | 60<br>61                                     |          |          |                | _  |          |          |              |                |          |
|     |              | 62   |          |          |                |  |          |          |              |                |          |
|     |              | 63   |          |          |                | Т  | _        |          | Т            |                |          |
|     |              | 63<br>64<br>65                               |          | -        |                |  |          | _        | Н            | М              | $\vdash$ |
|     |              | 65   | $\vdash$ | -        |                |  | -        | _        | Н            | $\vdash$       | $\vdash$ |
|     |              | 66   | -        |          | -              | <del> </del>   | _        | _        | $\vdash$     | $\vdash$       | _        |
|     |              | 67   |          |          | -              | ┢  |          |          | -            | -              |          |
|     |              | 69   |          |          | -              | ┝  |          | -        |              | -              | -        |
|     | <u> </u>     | 68<br>69                                     |          |          |                | <del> </del>   |          | -        |              | -              | $\vdash$ |
|     | <u> </u>     | 70   |          |          | _              | _  |          | _        |              | H              |          |
|     |              | 70   |          |          | ┝              | ┝  |          |          | -            | H              | -        |
|     | <u> </u>     | 72   |          | _        | ⊢              | $\vdash$   |          |          | -            | H              |          |
|     | ļ            | 72   | -        |          |                |  |          |          | -            | ├              |          |
|     | -            | 70<br>71<br>72<br>73<br>74<br>75<br>76<br>77 | -        |          |                | -  |          |          | -            | ⊢              |          |
|     |              | 75   |          | _        | -              | -  | -        |          | <del> </del> | $\vdash$       |          |
|     |              | 76   |          | _        | _              | -  | -        | -        | -            | ┢              |          |
|     | <del></del>  | 77   | _        | _        | ┝              | -  | $\vdash$ | _        | ┝            | $\vdash$       | _        |
|     | ļ            | 79   |          |          |                | -  | -        |          |              | -              |          |
|     | -            | 70   | $\vdash$ | _        | ┢              | -  | -        | -        |              | <del> </del>   |          |
|     | <del> </del> | 78<br>79<br>80<br>81                         | $\vdash$ | _        | -              | -  |          | -        | $\vdash$     | $\vdash$       |          |
|     |              | 91   | -        |          | -              | <del> </del>   |          |          | ⊢            | $\vdash$       |          |
|     | <u> </u>     | 82   | -        | _        | ┝              | -  |          | _        | -            | ├              |          |
|     | _            | 02   |          | -        | -              | $\vdash$   | -        | _        | $\vdash$     | ┝              | $\vdash$ |
|     | $\vdash$     | 82<br>83<br>84<br>85                         | $\vdash$ |          | $\vdash$       | $\vdash$   | -        |          | -            | <del> </del>   | $\vdash$ |
|     | <del></del>  | 05   | $\vdash$ | _        | $\vdash$       | $\vdash$   | _        |          | $\vdash$     | ├              | _        |
|     | <u> </u>     | 00   |          |          | _              | ┝  |          |          | -            | -              |          |
|     | <u> </u>     | 00   |          |          |                | <u> </u>   |          | _        | ⊢            | ⊢              |          |
|     |              | 00   |          |          | ├              | ┝  | _        | _        | ⊢            | ├─             | _        |
|     |              | 86<br>87<br>88<br>89                         |          |          | -              | <u> </u>   |          |          | -            | ļ              |          |
|     |              | 09   |          |          | -              | $\vdash$   |          | _        | _            | H              | _        |
|     |              | 90<br>91                                     |          |          | ┝              | <u> </u>   |          |          | _            | -              |          |
|     |              |  |          | <u> </u> | ├-             | ├—   | <u> </u> | _        | ┡-           | <u> </u>       | <u> </u> |
|     |              | 92<br>93                                     | $\vdash$ |          | ļ              | <del> </del>   | <b></b>  | <u> </u> | <u> </u>     | ļ <sup>1</sup> |          |
|     |              | 93   |          |          | -              | <u> </u>   |          |          | <u> </u>     | $\vdash$       |          |
|     |              | 94<br>95                                     |          | <u> </u> | $\vdash$       | <del> </del> —   | <u> </u> | $\vdash$ |              | <del> </del> - | $\vdash$ |
|     |              | 95   | Ь.       |          | <del>  -</del> | <u> </u>   |          | _        | ⊢            | <u> </u>       | <u> </u> |
|     | <u> </u>     | 96<br>97                                     | Ь.       |          | $\vdash$       | $\vdash$   | <u> </u> | <u> </u> | <u> </u>     | <u> </u>       | Н        |
|     |              | 97   | <u> </u> |          | <del> </del> — | <u> </u>   | <u> </u> | <u> </u> | <u> </u>     | <u> </u>       | <u> </u> |
|     |              | 98   | $\vdash$ |          | $\vdash$       | <u> </u>   | <u> </u> | _        | <u> </u>     | <u> </u>       | _        |
|     |              | 99   |          |          | <u> </u>       | $ldsymbol{ld}}}}}}$ | L.       |          | L_           | <u></u>        |          |

| CI           | aim   |              |   |              | _ [      | Date         | €        |          |          |                        |
|--------------|---|--------------|---|--------------|----------|--------------|----------|----------|----------|------------------------|
| CI           | Original  |              |   |              |          |              |          |          |          |                        |
|              | 101<br>102<br>103   |              |   |              |          |              |          |          |          |                        |
|              | 102   |              |   |              |          |              |          |          |          |                        |
|              | 103   |              |   |              |          |              |          |          |          |                        |
| <u> </u>     | 104<br>105  |              |   |              |          |              |          |          |          |                        |
|              | 105   |              |   |              |          |              |          |          |          | Ш                      |
| <u> </u>     | 106   |              |   |              |          |              |          |          |          | Ш                      |
| <u> </u>     | 107   |              | _ | _            |          |              | _        |          | _        | Н                      |
| ļ            | 108   |              |   | _            |          |              |          |          |          | Н                      |
| <u> </u>     | 109<br>110  |              |   |              |          | _            |          |          |          | Н                      |
|              | 111   | H            |   | H            |          |              | Η.       | _        | _        | $\vdash\vdash$         |
|              | 112   |              |   | H            |          |              | -        |          |          | Н                      |
|              | 112<br>113  |              |   |              |          | T.           |          |          |          | $\vdash$               |
|              | 114   |              |   |              |          |              |          |          |          | П                      |
|              | 115<br>116<br>117<br>118  |              |   |              |          |              |          |          |          |                        |
|              | 116   |              |   |              |          |              |          |          |          |                        |
|              | 117   |              |   |              |          |              |          |          |          |                        |
|              | 118   |              |   |              |          |              |          |          |          | Ш                      |
|              | 119   |              |   |              |          |              | L        |          |          |                        |
| <u>.</u>     | 120   |              |   |              |          |              | _        |          |          | Ш                      |
|              | 121   |              |   | _            |          |              | _        |          |          | Ш                      |
| <u> </u>     | 122   |              |   | <u> </u>     |          |              | <u> </u> |          |          | Щ                      |
|              | 124   | -            | - | -            |          |              | ┝        |          | H        | $\vdash$               |
|              | 125   |              |   |              |          |              | -        |          | ┝        | H                      |
|              | 126   |              |   |              |          | Н            |          |          |          | $\vdash$               |
|              | 127   | <del></del>  | _ |              |          | $\vdash$     |          |          |          | П                      |
|              | 120<br>121<br>122<br>123<br>124<br>125<br>126<br>127<br>128<br>129<br>130 |              |   |              |          | Г            |          |          |          |                        |
|              | 129   |              |   |              |          |              |          |          |          |                        |
|              | 130   |              |   |              |          |              |          |          |          |                        |
|              | 131<br>132  |              |   |              |          | $oxed{oxed}$ |          |          |          | Щ                      |
|              | 132   |              |   |              |          |              |          |          | <u> </u> |                        |
| ļ            | 133<br>134  | <u> </u>     |   | Ľ.           |          |              | ļ        | _        | <u> </u> | Щ                      |
|              | 134   | <u> </u>     |   |              |          | ļ            | <u> </u> | _        | <u> </u> |                        |
| -            | 135   | <u> </u>     | _ | <u> </u>     | <u> </u> | -            | ├        | $\vdash$ | $\vdash$ | $\vdash \vdash$        |
| <u> </u>     | 137   | $\vdash$     | - | -            |          |              | ┢        | -        | ┝        | $\vdash \vdash$        |
|              | 136<br>137<br>138   | <del> </del> |   | $\vdash$     | -        | -            | Ι        | -        | $\vdash$ | $\vdash \vdash \vdash$ |
|              | 139   |              |   |              |          | Н            |          |          |          | Н                      |
|              | 140   |              |   |              |          |              |          |          |          | П                      |
|              | 141   |              |   |              |          | 7            |          |          |          |                        |
|              | 142   |              |   |              |          |              |          |          |          |                        |
|              | 143   |              |   |              |          |              |          |          |          |                        |
|              | 144   | L_           |   | $oxed{oxed}$ |          |              | L.       |          |          | Ш                      |
| <u> </u>     | 145   | <u> </u>     |   | L            | _        | <u> </u>     | <u> </u> |          | <u> </u> | Щ                      |
| ļ            | 146   | _            |   |              | ļ.,      | L            | <u> </u> |          | <u> </u> | Ш                      |
| <u> </u>     | 147   | <u> </u>     | _ | <u> </u>     |          | $\vdash$     | _        | $\vdash$ | <u> </u> | $\vdash \vdash$        |
|              | 148<br>149  | $\vdash$     | ١ | <del> </del> | $\vdash$ | H            | ├-       | $\vdash$ | -        | $\vdash \vdash$        |
| <del> </del> | 150   | <del> </del> | - | $\vdash$     | -        | $\vdash$     | ├        | $\vdash$ | -        | Н                      |
| Ц            | 130   |              |   |              |          |              | L        |          |          | ш                      |